

Expert Advice For the Automobile Owner

Queries and Replies Covering Matters of Importance to the Man Who Runs a Car

In washing a car will a mixture of gasoline and water cut the grease? If so, how should it be applied?

No doubt the addition of gasoline to the water in connection with sponging the car will efficiently aid in the cutting of the grease. It would have to be applied either in a spray or sponge, as these are the only two practical methods of mixing it in such a way that it would combine closely enough to form a suitable mixture for cleaning. Kerosene is also frequently used in this manner with success.

I have a car with a two speed rear axle. Whenever I go down hill or over a bump with the clutch out I hear a rattle. What is the cause of this?

The rattle you mention is probably from the idle pinion on the rear axle. In this axle there are two bevel pinions constantly in mesh, and one of these is always running idle, and the particular gear which is delivering the power from the motor depends upon the position of a dog clutch. When the car goes over a rough spot with the clutch out there is a tendency for the drive shaft to revolve at an unequal rate of speed, due to the inequalities of the road, with the result that the idle pinion is alternately thrown backward and forward against the bevel gear, with which it meshes, thus making a rattle. There is always a certain amount of back lash in these gears, and the amount of noise will naturally depend upon the extent of this play. There is nothing serious about this, as the noise occurs only at rare intervals, and then is not the indication of trouble.

Will you kindly tell me how to bend the gasoline and other tube lines in short arcs without the pipe flattening?

Copper tubing of small diameter can be readily bent into short curves by melting rosin and pouring it into the tube. When this becomes cold it solidifies within the tube, and the tubing can be bent like a piece of solid copper. After the desired bend has been obtained the rosin can be run out by heating the tube with a blow torch. Another method sometimes used is to fill the tube with sand, but the rosin method gives the better results.

Why has a rotary valve engine five or seven cylinders instead of four, six or eight?

The odd number of cylinders gives a more even torque in a rotary cylinder engine. Questions of balance make an even number of cylinders preferable in the conventional type of motor.

Is it possible to start the motor in a car when the self starter fails to work and the crank is missing?

When the starter fails and the hand crank is not available the best method of starting the motor is to jack up one of the rear wheels so that it will turn without touching the ground. Then place the gear shift lever in high, and a few turns of the uplified wheel will start the motor. Place the gear shift lever in neutral before letting down the jacked up wheel or you will have a runaway on your hands, or at least the motor will stall, and you will have all your work to do over again. Properly done the entire operation takes only a few moments.

What are the common causes for a motor missing fire?

Missing fire may be caused by an overrich or too lean mixture, by poor valve adjustment, inaccurate valve or ignition timing, leaks around the spark plugs, cylinder plugs, manifolds, etc., loose ignition wires, weak magneto magnets, water in fuel, faulty spark plugs or those with poorly adjusted electrodes, carbon deposits in the cylinders and overloading.

When I throttle my car down on high gear it begins to jump and jerk as though the clutch were slipping. The clutch is all right, however. What can be the trouble?

The jumping and jerking action is probably due to the motor missing fire, caused either by poor ignition or faulty carburetion at low engine speeds. Mixtures may be too lean or too rich, there may be leaks in the intake manifold, or the spark plug points may be too far apart or too near together. Look at them first and see that they are spaced a thirty-second of an inch apart. Then see that your vibrators are adjusted. If the trouble is still in evidence your magneto magnets may be weak and require recharging.

What is the advantage or disadvantage of the cantilever spring in regard to the three-quarter elliptic?

The main advantage of the cantilever spring over the three-quarter elliptic is that it will give the same carrying capacity with the proper flexibility with considerably less weight. Another advantage lies in its slow period of vibration and the ability to eliminate rebound to a great extent. The weight of a cantilever is nearly all unsprung weight.

In the disadvantages the principal one is that a stiff frame is necessary and that a roll is given to the body when the car turns a corner.

How can one tell when a magneto needs remagnetizing?

When the magnets will not lift and hold about fifteen pounds they are said to be weak. Missing fire at low speeds is the result of weak magnets. When this occurs the magnets should be recharged.

What are the respective advantages and disadvantages of the T head and L head types of motors?

The T head motor, because its valves are located on opposite sides, allows of the use of large valves, and hence more power is obtainable than in the L head variety, other things, of course, being equal. It is usually more costly to construct than the L head type and has a more symmetrical appearance. The T head, however, is heavier and more complicated than the L head design, the latter using only one cam shaft and having the valves all on one side.

What are the advantages and disadvantages of the valve in the head motor?

The chief advantage claimed for the valve in the head motor is that, for a given size, it has more power than an L head or T head, because of the fact that larger valves may be used and the combustion chamber given a more spherical shape. There are a number of manufacturing advantages, one of which is that the entire combustion chamber may be machined and given a high polish, thus preventing, to a great extent, the accumulation of carbon.

The loss of heat through the cylinder walls of a motor depends to a great extent upon the surface of the walls, and in a properly designed valve in the head motor this wall area is small, compared with that of another type of motor of the same size. This reduction of wall area is obtained because of the absence of valve pockets.

The main disadvantage of the valve in the head motor, especially one using valve cages, is that the valve seats cannot be cooled as effectively as if the seat were a part of the casting. This is true in the cage construction, because the heat, in order to get from the valve seat to the water jacket, must overcome the resistance of the joint between the cage and the cylinder casting. This lack of cooling would not materially affect the inlet valves, as they are kept comparatively cool by the incoming gas, but it would mean more valve grinding in the case of the exhaust valves.

Is it possible to maintain pressure in a rear fuel tank when the tank cap is missing?

In cases of this sort take an old inner tube, cut out a piece about eight or ten inches long, tie one end tightly, so as to be air tight, then insert the free end into the tank. Next remove the valve connection from the pump, insert the hose in the open end of the tube and pump until the tube completely fills the hole in the tank. Then tie the outer end securely. This contrivance will hold several pounds pressure in the tank and will last for some time.

Is three-eighths of an inch too much play in the wrist pin bushing?

Three-eighths of an inch is entirely too much play for the wrist pin bushing, assuming that up and down play is meant. There should be so little play that it cannot be felt by a movement of the wrist pin.

Can I silverize glass reflectors? If so, what are the ingredients and in what proportions are they used?

An amateur can silverize reflectors, but it is very difficult to make a good job of it. The method by which this work has been carried out is as follows: First fasten to a block of wood the finest possible grade of emery cloth. With this the reflector is smoothed down to a fine finish. It is next necessary to have a melting pot and a thermometer which is capable of measuring more than 212 degrees. Two ounces of lead, two ounces of tin and four ounces of chemically pure bismuth are melted together. Eight ounces of mercury are added at 212 degrees F. and mixed with the melted mixture. This is applied while warm with a smooth camel's hair brush.

Which will give the better results, 60 or 74 test gasoline?

As between 60 and 74 test gasoline, the 60 test fuel has been found to give the best results as far as mileage is concerned. The gasoline which we get nowadays is much heavier than that on the market, say, five or ten years ago.

Can an expert gain any advantage by changing from automatic to hand control in a battery ignition system?

A skilled driver might get better results with a hand control of the spark than could be obtained with the automatic type of ignition control for the reason that grade climbing can be accomplished much easier and the loads of the motor considered. In other words, the driver can shift his spark to suit road and motor conditions and thus get the highest efficiency at all times.



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Tell your grocer to send you a package of Krumbles

Don't tell the folks anything about it beforehand.

Just serve KRUMBLES all around at breakfast, with cream or milk.

Watch father and the children take notice of the KRUMBLES flavor.

KRUMBLES is the new Wheat breakfast food—invented and perfected by W. K. Kellogg, manufacturer of the original Toasted Corn Flakes.

A new idea—a new method—a new food—a new flavor, and a fine natural sweetness all its own.

KRUMBLES is just introduced in this city. Already it numbers its friends by the hundreds all over town.

In the Kellogg's "Waxtite" package—grocers everywhere— 10 cents

Look for this signature—

W.K. Kellogg

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GRIMSBY-BEACH

The announcement of the marriage of Miss Molly Grimsby, of Fruitdale, S. D., and John Beach, of Alliance, which event occurred at Wahoo, Nebr., on January 20, last, has just been made public, much to the surprise of their friends. These young people met in Lincoln, where the bride was attending school. The marriage was kept a secret even to the members of the bride's and groom's families until last Friday at a luncheon at the groom's home. Mrs. Beach is a highly respected and accomplished young lady, and during her stay here has won many friends. Mr. Beach has a position in the Burlington freight department, and was formerly connected with the Herald in the capacity of bookkeeper. Their many friends join in wishing them a long, happy voyage on the sea of wedded life.

Whooping Cough

"When my daughter had whooping cough she coughed so hard at one time that she had hemorrhage of the lungs. I was terribly alarmed about her condition. Seeing Chamberlain's Cough Remedy so highly recommended, I got her a bottle and it relieved the cough at once. Before she had finished two bottles of this remedy she was entirely well," writes Mrs. S. F. Grimes, Crooksville, Ohio. Obtainable everywhere.

Stole Revolver

Wilbur Knapp, aged nineteen years, was employed as a chore boy on the Leith ranch by Fred Hoover, manager, a week ago Thursday. On Sunday he stole a revolver, valued at \$12, and walked twenty-five miles to Alliance, arriving Monday. A week later he was caught by Mr. Hoover and when arraigned before County Judge L. A. Berry pleaded guilty and was sentenced to the reform school. The case was prosecuted by County Attorney Lee Basye. The boy said he was an orphan and had run away from the Ohio state reform school and that he did not know why he stole the gun. The gun was located in a local second-hand store and replevined by Mr. Hoover.

Cheap Farm for Quick Sale

One-half section within six miles of Alliance. Near railroad. Choice land and desirable. \$13.50 per acre. This will sell quick. Address Box 5334, care Alliance Herald, Alliance, Nebraska. 16-1f-5334

Lame Back

Lame back is usually due to rheumatism of the muscles of the back. Hard working people are most likely to suffer from it. Relief may be had by massaging the back with Chamberlain's Liniment two or three times a day. Try it. Obtainable everywhere.

BIDS WANTED

Bids are wanted for the removing and filling in of dirt on the west side of Box Butte Avenue, between Sixth and Ninth streets for the bringing of sidewalks to grade. All bids must be in by noon, May 25th. The city council reserves the right to reject any or all bids.

CARTER CALDER, City Clerk

23-2t-5563

BIDS WANTED

Bids are wanted for the construction of a concrete culvert at the intersection of Fourth Street and Missouri Avenue. Said culvert to be not less than sixty feet in length. Plans and specifications can be secured from the city engineer. All bids must be in by noon, May 25th. The city council reserves the right to reject any or all bids.

CARTER CALDER, City Clerk

23-2t-5563

BIDS WANTED

Bids are wanted for the removing and replacing of the cement sidewalk on the west side of Box Butte Avenue, between Sixth and Ninth Streets the walk to be replaced after the grade has been made. All bids must be in by noon, May 25th. The city council reserves the right to reject any or all bids.

CARTER CALDER, City Clerk

23-2t-5563

NOTICE FOR BIDS

Sealed bids will be received by the city clerk of Alliance, Nebraska, for the removal of a quantity of dirt on Fifth street between Big Horn Avenue and Box Butte Avenue, sufficient to put the street to grade. Specifications may be obtained from the city engineer. Board reserves right to reject any or all bids. All bids must be in by noon, May 25.

CARTER CALDER, City Clerk

24-1t-5579

NOTICE

All dogs must be provided with a 1915 license within the next thirty

days and they must be securely fastened to the collar and worn at all times to afford protection. Otherwise, the dogs will be taken up and if not claimed within twenty-four hours they will be killed.

PENROSE E. ROMIG, Mayor. 24-1f-5577

NOTICE

To F. F. Badgley, Ada Fielding, Bertha P. Fleming, Guy H. Lockwood, Truman W. Brown, Alice Tierman, F. A. Woten.

You and each of you are hereby notified that on the 17th day of May, A. D. 1915, the following resolutions were duly adopted by the City Council of Alliance, Nebraska, to-wit:

RESOLUTION

Be it resolved by the Mayor and Council of the City of Alliance, Nebraska, that a sidewalk be, within thirty days from the publication of this resolution, constructed and laid to the established grade: On the north side of East 6th street, and adjoining the following described premises, to-wit: Lot 24 and Lot 34, County Addition to Alliance, Nebraska;

On the east side of Big Horn Avenue, and adjoining the following described premises, to-wit: Lot 7, Block 1, First Addition to Alliance, Nebraska;

On the North side of West 6th street and adjoining the following described premises, to-wit: Lot 7, Block 1, First Addition to Alliance, Nebraska;

On the East side of Laramie Ave. and adjoining the following premises, to-wit: Lot 13, Block 3, Second County Addition to Alliance, Nebraska;

On the West side of Big Horn Ave. and adjoining the following described premises, to-wit: Lot 2, Block 4, Second Addition to Alliance, Nebraska.

On the North side of West 8th street and adjoining the following described premises, to-wit: Lot 7, Block 10, Second Addition to Alliance, Nebraska.

On the West side of Big Horn Ave. and adjoining the following described premises, to-wit: Lot 5, Block 1, Second Addition to Alliance, Nebraska.

Said sidewalks shall be constructed by the owners of said property without delay and in accordance with the specifications contained in Ordinances Nos. 111 and 126 of the City of Alliance, Nebraska.

CARTER CALDER, City Clerk.

Try This on Your Eczema

If you are afflicted with Salt Rheum, Tetter, dry Eczema, Acne or Pimples, buy a jar of Dry Zensal. For that watery eruption or Weeping Skin, use Moist Zensal. 50-cents the jar.

HARVEY F. THIELE

MONUMENTS

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Grand Island, Nebraska

Write for information or call on our Local Agent

AL. WIKER Agent at Alliance

When England delays action on the drink question is it a case of sober second thought?